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Questions and Answers Release of Northern San Juan Basin FEIS (August 4, 2006)

This project has been ongoing for years - What is new?

The San Juan Public Lands Center (Bureau of Land Management and San Juan National Forest) will issue the Final Northern San Juan Basin Coal Bed Methane (CBM) Project Environmental Impact Statement (Final EIS) on August 4, 2006, in conjunction with the Notice of Availability being published in the Federal Register. The Final EIS analyzes the environmental effects of a proposal by industry to develop coal bed methane (CBM) gas wells on previously leased federal minerals within a 125,000-acre study area in La Plata and Archuleta counties north of the Southern Ute Indian Reservation in southwestern Colorado. The proponents also provided plans for development of private lands and minerals in the study area, but no federal decisions will be made on private mineral development. Information on private mineral development has been included in the Final EIS for cumulative-impact analysis purposes only. San Juan Public Lands National Forest Supervisor/BLM Center Manager Mark Stiles is the Authorized Officer responsible for preparing the Final EIS.

What is the background of this project?

In 2001, six energy companies proposed to drill 185 CBM wells on federal mineral estate as part of an overall proposal for a total of 284 new CBM wells within the Analysis Area. The companies' proposal also included construction of ancillary facilities needed to support these wells. These facilities include access roads; pipelines for gathering gas and produced water; electric facilities; facilities for measuring and compressing gas; and facilities for treating, containing, and disposing of produced water using deep underground injection. The companies' proposal included directional drilling to avoid steep slopes in portions of the HD Mountains, where feasible.

What kind of public involvement has been undertaken?

Since 2001, five public scoping meetings were conducted before the Draft EIS was prepared, then nine public meetings were held to take comments on the Draft EIS, including one hearing, four open houses, and four meetings sponsored by the BLM Southwest Resource Advisory Council (SWRAC). County commissioners and city governments have been briefed throughout the process. Tribal briefings were given to the Hopi and Southern Ute Indian Tribes; consultations were held with 20 other tribes. The comment period was extended to six months.

What types of comments were received?

The USFS Content Analysis Team (CAT) organized comments for response, receiving about 68,000 responses (mostly emails). Responses contained 4,505 unique comments. Comments were synthesized into 412 public concerns with many facets focusing on:

- Protecting roadless values in the HD Mountains, and addressing impacts to wildlife, steep unstable slopes, highly erosive soils;
- Evaluating all available evidence related to Fruitland Outcrop impacts;

- Addressing concerns about human health/safety and property values by not drilling near the outcrop until necessary information is acquired;
- Protecting regional air quality;
- Protecting water resources by addressing surface and ground water impacts, water depletions, watershed impacts;
- Considering opportunities and limitations of other drilling methods;
- Protecting cultural resources;
- Protecting old-growth forests;
- Preventing noxious weeds;
- Obtaining financial guarantees.

How is the Final EIS different from the Draft EIS?

New alternatives and mitigation measures in the Final EIS respond directly to public involvement and collaboration. We received a tremendous amount of public input on the Draft EIS, including almost 68,000 comments submitted during the nearly six-month comment period, or voiced during our many public forums. This public input had a huge effect on our overall analysis of the project. The earlier seven alternatives in the Draft EIS have been consolidated into five final alternatives. The Final EIS clearly addresses recommendations by the BLM Southwest Colorado Resource Advisory Council and resolutions by local governments, and seeks to minimize impacts from development by maximizing mitigation measures. The most significant change in the Final EIS is the addition and analysis of new alternatives 6 and 7.

Five alternatives are analyzed in detail in the Final EIS. Thematically, they represent the Proposed Action (Alternative 1), Maximum Development (Alternative 2), BLM and FS modifications of the Proposed Action (Alternatives 6 and 7), and the No Action Alternative (Alternative 5). Alternative 7 is the BLM and Forest Service Preferred Alternative. Each of the alternatives considers the federal action, which is development of federal oil and gas leases within the Analysis Area, and also development on other jurisdictions, including private and state leases within the Analysis Area for cumulative-impacts purposes.

Activity	1 Industry Proposed Action	2 Max. Develop	5 No Action	6	7 (Preferred)
Well Pads	162	301	15	78	127
Road Miles	97	162	17	47	72
Impacted Long-term Acreage	487	833	53	270	381

- In addition, industry plans to develop approximately 100 well pads and 30 miles of road construction on private lands, which would result in approximately 300 acres of disturbance.

How was the Preferred Alternative developed?

Alternative 7, the Preferred Alternative, was developed in response to comments and concerns received on the Draft EIS. Among the most prominent of concerns was locating new roads and gas-development facilities in the HD Mountains; specifically with authorizing facilities in areas of steep, unstable slopes and environmental concerns including water, air and cultural resources, wildlife habitat, and old-growth ponderosa pine forests. Comments warned against prescribing

drilling technologies, but also cautioned the agencies not to assume conventional drilling approaches were the only option. Comments highlighted substantial evidence supporting some level of cause-and-effect relationship between CBM development and Outcrop impacts. Input called for a thorough examination of potential mitigation measures and for securing adequate financial assurances before development begins, especially in sensitive areas. Finally, comments from project proponents and others clearly stated concerns with arbitrarily conditioning existing leases with new restrictions.

Why was Alternative 7 chosen as the Preferred Alternative?

Alternative 7 is the Preferred Alternative because it best balances valid existing gas development lease rights with social and environmental issues. Alternative 7:

- does not allow development of CBM facilities or access across unstable areas, as proposed, in the HD Mountains south of the Relay Tower Road, south of the Rock Bridge, and in Ignacio Creek.
- requires geologic, hydrologic and gas-reservoir information to be obtained from individual, or small groups of, test wells in less sensitive areas before development is considered in more sensitive areas within the 1½-mile Outcrop buffer zone. This systematic approach would include intensive monitoring to better characterize the hydrogeology of the Fruitland Formation and detect potential impacts before they manifest at the Outcrop.
- requires mitigation measures to address potential adverse impacts to water, vegetation, safety, and private property.

What does Alternative 6 analyze, and why is it not the Preferred Alternative?

Many comments, including proclamations passed by the La Plata and Archuleta County Commissioners, Town Councils of Bayfield and Ignacio, and City of Durango, requested we not permit surface facilities in the HD Mountains Roadless Area or within the 1½-mile Outcrop buffer zone. We developed Alternative 6 in response to these comments, but were not able to select this as our preferred alternative, because denying surface occupancy or prescribing drilling technologies would be inconsistent with lease rights, and because such action is not supported by findings of potential impacts.

Similarly, to simply deny development in the Outcrop buffer zone is not consistent with the current body of information and analyses, which suggest buffer zone gas wells may cause impacts (both positive and negative) to occur sooner than basin-ward gas wells, but overall, Outcrop impacts are caused, in part, by cumulative production effects in the Northern San Juan Basin gas field. The evidence also suggests some areas along the Outcrop are more sensitive to impacts than others, regardless of gas well proximity. Although Alternative 6 is not our preferred alternative, it contains important information that frames the overall analysis and should prove invaluable for development as technologies and land-use plans evolve.

How does the Final EIS propose to mitigate major issues brought up by the public?

The Final EIS is based on the analysis presented in the Draft EIS, public input provided on the DEIS, and on new information that has become available. Key changes in mitigation measures made in response to public comments include:

- Revised mitigation measures for water, vegetation, safety and private property impacts under Section 3.3 - Migration and Seepage of Methane,
- Updated spring locations, watershed impact analyses, and mitigation measures under Sections 3.5 and 3.6 - Surface and Groundwater, and
- Revised appendices presenting requirements for:
 - financial guarantees (Appendix A, Surface Use Requirements),
 - an updated report on alternative drilling technologies (Appendix D),
 - examples for mitigation of outcrop impacts (Appendix N), and
 - responses to public comments (Appendix O).

What is the next step?

The FEIS will be available for at least 30 days after the date the Environmental Protection Agency publishes its Notice of Availability in the *Federal Register* before any final project determinations will be made in a Record of Decision (ROD). The ROD, when issued, will document BLM and FS project decisions described in FEIS Section 1.4. The ROD will also document mitigation measures that will be applied to the selected alternative.

The Final EIS and its supporting project record will be the basis for the ROD that will document BLM and FS decisions. The decisions will incorporate the terms and mitigation requirements that the agencies deem necessary to protect the surface and sub-surface resources based on disclosure of environmental effects in this EIS for CBM field development.

Project decisions will be documented in the ROD signed by the BLM and FS responsible officials and will apply to federal mineral estate only. The private mineral estate is under the administrative jurisdiction of the Colorado Oil and Gas Conservation Commission (COGCC) and is not subject to the decisions documented in the ROD for this proposal. Decisions by other jurisdictions to issue (or not to issue) approvals on to this proposal may be aided by the disclosure of impacts that is available in this analysis. The ROD will make the following decisions:

- Overall plan and conditions of development, including environmental protection measures that apply to the entire Project Area, or to portions of the area.
- Conditions under which ancillary facilities requested by the proponent may be constructed (including water and gas lines and compressor stations on FS/BLM lands).
- Conditions of approval specific to the approximately 54 pending surface-use plans of operation (SUPOs) and applications for permit to drill (APDs) and related facility applications submitted by the companies.
- Whether to waive, continue, allow an exception for, or modify the no surface occupancy stipulations (NSOs) issued May 14, 2001, on five leases within the Project Area.
- Whether to continue or to terminate in whole or in part the Interim Criteria for development within the Project Area as described in Notice to Lessees (NTL) No. CO-SJFC-2000-01.
- Whether to amend the San Juan National Forest Land and Resource Management Plan to achieve conformance for old-growth and transportation-system management in big-game winter range in the Project Area.

What is the life of the project?

The overall life of the project, including construction, production, and reclamation, would be approximately 40 years. Construction of wells would begin during 2006 and would continue for 5 years. The productive life of each well is expected to be about 25 to 30 years. Accordingly, production from the wells drilled at the end of the 5-year drilling period is expected to conclude by 2040. This environmental analysis of the companies' proposal to develop the gas field focuses on a 125,000-acre Analysis Area in the Northern San Juan Basin of Colorado. The Project Area occupies portions of La Plata and Archuleta Counties.

What is an Environmental Impact Statement?

When land management agencies are approached by the private sector with a proposal for federal lands and minerals that will result in significant impacts, the agencies must study the proposal through an environmental impact statement (EIS) process outlined by the National Environment Policy Act (NEPA). The EIS studied the overall development scenario in the Analysis Area, as well site-specific information for individual well pads. However, although the EIS considers cumulative effects from the proposed additional development on private lands, the ROD will make no decisions involving private property, because the BLM/FS have jurisdiction only on federal lands and minerals.

What is the Analysis Area?

The Analysis Area encompasses 125,000 acres of public and private lands north of the Southern Ute Indian Reservation in La Plata and Archuleta counties. Currently, there are 300 existing coal bed methane wells in this area. Although the EIS considers cumulative effects from the proposed additional development on private lands, it makes no decisions involving private property, because the EIS has jurisdiction only on federal lands and minerals. The Analysis Area is part of the San Juan Basin, which covers 100 square miles in northwestern New Mexico and southwestern Colorado. One-third of the basin is in Colorado and includes the Southern Ute Indian Reservation. The Analysis Area includes only the portion of the basin in Colorado north of the Southern Ute line. The Analysis Area includes the HD Mountains.

What is coalbed methane (CBM)?

CBM is a natural gas produced by the decomposition of carbon-rich organic matter during coal formation. It is composed of 80-99% methane, along with ethane, propane, nitrogen, and carbon dioxide. Methane is the main component of natural gas used in homes. The Fruitland coal seams of the Northern San Juan Basin are different than conventional gas formations. The methane is chemically adhered, or adsorbed, to the surface of the coal. Natural gas found in other formations is found as a free gas in pores and fractures of rock.

The Fruitland coal beds, which contain CBM gas, lie at a depth of about 3,500 in the interior of the basin, but the coal seams tilt upwards and are exposed at the surface at the outcrop rim. They retain a greater amount of gas at shallow depths in comparison to conventional reservoirs at comparable depths and pressures. The Fruitland Outcrop, which forms the northern boundary of the analysis area, extends for about 90 miles across southwestern Colorado, roughly from the eastern edge of Durango, Colorado, to near the Piedra River east of Bayfield, Colorado.

What is the history of CBM development in the Analysis Area?

In 1980, Congress passed the Crude Oil Windfall Profits Tax Act with tax incentives for unconventional fuel resources. In the early 1980s, management plans for the San Juan National Forest and BLM San Juan and San Miguel Resource Areas identified all federal lands in the Analysis Area as suitable for oil and gas leasing. Most of the leases in the project area were issued in the 1970s. In the 1980s and 1990s, approximately 300 CBM wells were constructed in the project area, including approximately 70 CBM wells on BLM/NFS lands under these plans.

Why is the HD Mountains Roadless Area open to energy development?

Federal lands in the Analysis Area, including the HD Mountains Roadless Area, were identified as suitable for oil and gas leasing by USFS and BLM management plans in the early 1980s. Since then, most of the federal lands proposed for development have been leased. Once subsurface federal minerals are leased, the lease represents a contract between the government and the leaseholder. Leasing of energy resources is a decision made by BLM with input from the appropriate surface managing agency. There is nothing that preempts such development in an area inventoried as roadless.

The following chronology summarizes the timing and status of land-management decisions relevant to the HD Mountains Roadless Area:

- Early 1970s – USGS identifies the San Juan Basin as having high potential for oil and gas development including the HD Mountains.
- 1974–77 – Large portions of the HD Mountains are leased for oil and gas development.
- 1977–79 – RARE II identifies 20,010 acres of the HD Mountains as an Inventoried Roadless Area. Oil and gas leases issued during this period are issued with No Surface Occupancy stipulations.
- 1979 – RARE II recommends that the HD Mountains Inventoried Roadless Area not be included in the National Wilderness Preservation System.

- 1980 – The Colorado Wilderness Act does not include the HD Mountains Roadless Area in the National Wilderness Preservation System.
- 1980 – The Energy Security Act directs the Secretary of Agriculture to process leases on National Forest System lands regardless of the status of any ongoing planning efforts.
- 1981 – The No Surface Occupancy (NSO) stipulations are rescinded for leases issued during the RARE II evaluation process.
- 1983 – The Record of Decision for the Land and Resource Management Plan for the San Juan National Forest reaffirms that the HD Mountains are available for and to be managed for multiple uses other than wilderness.
- 1992 – An EIS for the HD Mountains CBM Gas Field Development Project analyzes development of 95 coal bed methane gas wells. The ROD approves APDs for 16 wells and associated facilities and establishes a programmatic gas field development plan that would develop portions of the HD Mountains Roadless Area.
- 1993 – The Colorado Wilderness Act of 1993 designates certain lands within the SJNF for inclusion into the National Wilderness Preservation System. The HD Mountains Roadless Area is not included in the Act.

Each of these previous decisions and leasing actions affirmed that the HD Mountains Roadless Area's availability for multiple use management, and the issuance of leases within the Area, both before and after RARE II, reflected the Forest Service management intent.

What is a Roadless Area?

- Roadless areas are descriptions that result from inventories and Forest Plan Revisions and Amendments. The term, roadless, is not a management designation – it is an inventory of a current condition.
- Roadless areas are undeveloped areas inventoried on National Forests, which are without authorized roads (vehicle routes more than 50 inches wide constructed for full-sized vehicle use).
- Roadless areas typically exceed 5,000 acres in size – however, if an area is without roads and less than 5,000 acres, it may be put into the roadless inventory if it is manageable in a natural condition, a self-contained ecosystem, such as an island, contiguous to existing or proposed Wilderness areas, primitive areas, or roadless areas in other Federal ownership, regardless of their size.
- Roadless areas meet the minimum criteria that would allow them to be studied through a Forest Plan for consideration by Congress for Wilderness designation.
- Roadless does not preclude motorized trails, mechanized trails (bicycle use), snowmobile use, off-trail and off-road motorized use, hunting and fishing, nonmotorized recreation.
- Roadless, does not preclude development of oil and gas leases, timber harvest, livestock grazing, motorized and nonmotorized recreation, access to private inholdings, mining activities.

What is the timeline of past decisions regarding Roadless Areas?

The Roadless Area Conservation Rule was adopted on January 12, 2001 and was replaced by a new Rule in 2005. The Rule placed prohibitions on road construction and surface development when leases may be issued subsequent to the rule's adoption. However, most leases in the HD Mountains Roadless Area predate the rule and, therefore, are subject to prior existing rights and the standard stipulation to which they were assigned. Two leases issued after January 12, 2001, were issued with no-surface-occupancy stipulations, consistent with the 2001 rule. A chronology of legal challenges and of agency revisions to the rule follows:

- Jan. 12, 2001 – The “Final” Roadless Area Conservation Rule is adopted. It recognizes the prior existing right of lessees to develop oil and gas resources under existing leases, including road building.
- 2001 – The Roadless Rule is challenged in nine separate lawsuits in federal district courts in Idaho, Utah, North Dakota, Wyoming, Alaska, and the District of Columbia.
- May 10, 2001, the Idaho Federal District Court issues a preliminary injunction order prohibiting USDA and the FS from implementing the Roadless Rule. This action is appealed to the Ninth Circuit Court of Appeals by interveners in the Idaho cases.
- Dec. 12, 2002, the Ninth Circuit Court of Appeals issues a split 2–1 decision on the appeal of the Idaho District Court’s preliminary injunction reversing and remanding that action. Plaintiffs in the Idaho cases request that the Ninth Circuit reconsider this decision utilizing the full 10 judge panel. The Ninth Circuit declines this request on April 4, 2003, and issues its mandate to the Idaho District Court reversing and remanding the lower court’s action on April 14, 2003.
- April 14, 2003, the Ninth Circuit Court of Appeals issues a mandate to the Idaho Federal District Court to dissolve its preliminary injunction and proceed to a trial on the merits. This event actually made the roadless rule effective for the first time.
- June 9, 2003, USDA announced that it will implement the roadless rule but would be proposing an amendment to it to identify how Governors may seek relief from the prohibitions of the rule for limited exceptional circumstances within their State.
- June 9, 2003, USDA settles a lawsuit with the State of Alaska on the roadless rule by agreeing to publish a proposed rule to temporarily exempt the Tongass National Forest from the prohibitions of the rule. This proposed rule is published for public notice and comment on July 15, 2003.
- July 14, 2003, the U.S. District Court for the District of Wyoming finds the roadless rule to be unlawful and orders that the rule “be permanently enjoined”. That ruling has been appealed to the Tenth Circuit by interveners.
- May 11, 2004, the Tenth Circuit Court of Appeals agrees to hear the appeal of the Wyoming District Court’s July 14, 2003, order to permanently enjoin and set aside the roadless rule.
- July 12, 2004, USDA announces that it is publishing for public review and comment a proposed a rule that would replace the 2001 roadless rule with a petitioning process that would allow Governors an opportunity to seek establishment of or adjustments to management requirements for NFS inventoried roadless areas within their States. In addition, the FS announces that it is reinstating the interim protection measures for inventoried roadless areas that expired on June 14, 2003.
- May 13, 2005 – After review and consideration of public comment received on the proposed rule, the USDA revises the provision for Protection of Inventoried Roadless Areas, by adopting a new rule that establishes a petitioning process to provide governors an opportunity to seek establishment of or adjustment to management requirements for National Forest inventoried roadless areas within their states. The opportunity for submitting state petitions is available for 18 months following the effective date of this final rule. Under this final rule, submission of a petition is strictly voluntary, and management requirements for inventoried roadless areas would be guided by individual land management plans until and unless these management requirements are changed through a State-specific rulemaking.

How are decisions on Roadless Areas handled?

The baseline for management directions for inventoried roadless areas exists in currently approved land-management plans. It is these management requirements that governors could petition to adjust. If no petition is submitted, these management plan requirements would

remain unchanged, subject to amendment or revision under the National Forest Management Act. As part of the plan revision process, roadless areas are reviewed for Wilderness suitability. The HD Mountains Roadless Area, along with all other roadless areas on the San Juan National Forest, are the subject of such ongoing review, which should be concluded by 2007. During the interim, portions of mineral leases may be developed, altering the size of the land area that would be subject to review.

What about No Surface Occupancy (NSO) Stipulations in the HD Mountains Roadless Area?

No Surface Occupancy (NSO) stipulations assigned to five leases in the HD Mountains Roadless Area can be waived, continued, modified or excepted, in whole or in part, consistent with the management direction of the current management plan and the stipulations placed on the leases at the time they were issued. All other leases were issued with standard stipulations and are unaffected by the new Rule, and would have been unaffected by the old Rule if it were still valid.

What is the status of existing gas development in the Analysis Area?

Today, there are approximately 300 existing coal bed methane gas well pads and 200 miles of roads and pipelines in the Analysis Area across all jurisdictions. The HD Mountains are mostly undeveloped at this time, although there are approximately 20 producing CBM wells and 15 miles of existing gas roads and pipelines on the western and eastern flanks of the HD Mountains on the San Juan National Forest.

How much coalbed methane is the project expected to produce?

The total CBM reserve, including production to date, in the Northern San Juan Basin analysis area (excluding the Southern Ute Indian Reservation) is estimated at 2.5 trillion cubic feet, which could result in about \$15 billion in gross revenues. Coalbed methane wells proposed for the Northern San Juan Basin could accommodate the residential needs of hundreds of thousands of households per year based on average residential use rates. The life expectancy of the wells is estimated at about 25-40 years. Residential gas use has increased 13 percent in the last decade, and some two-thirds of new homes use natural gas heating. In 2000, the consumption of natural gas production was:

- 24% Residential,
- 16% Commercial,
- 39% Industrial, and
- 21% Generation of Electricity.

How can the public access the Final EIS?

- Hard copies of the FEIS are available for onsite review at the San Juan Public Lands Center, 15 Burnett Court, Durango; Columbine Public Lands Office, 367 Pearl Street, Bayfield; and Pagosa Public Lands Office, 2nd and Pagosa Street, Pagosa Springs.
- Hard copies are also available at public libraries in Durango, Pagosa Springs, and Bayfield, Colorado; and Farmington, New Mexico.
- CD copies may be ordered by calling Walt Brown at 970 385-1372.
- The FEIS is also available on-line at <http://www.nsjb-eis.net>, or <http://www.fs.fed.us/r2/sanjuan/projects/projects.shtml>.

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